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Mamlok on Day One: Strategies for Incorporating Recent Music Into the Early Undergraduate Music Theory Curriculum

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This research offers concrete solutions to two challenges that face music theory instructors seeking better coverage of post-tonal music in their undergraduate music theory curricula. The first of these challenges is the lack of curricular time dedicated to music composed since 1900, particularly given the typical course structure in which such topics are left for last. The second of the two challenges is the attitudes frequently held by students towards this music, which they may prejudge to be difficult, unfamiliar, aesthetically unappealing, or entirely divorced from previous topics. Instructors can at least partially overcome both of these challenges by frequently incorporating examples of art music from the post-tonal era into the early semesters of the undergraduate music theory curriculum (focusing in this paper primarily on demonstrating the applicability of this concept to topics generally covered in units on fundamentals).

I: Introduction

A cursory survey of literature on the teaching of post-tonal and contemporary music theory quickly reveals two recurring sentiments. The first is the tendency of instructors to bemoan the abbreviated treatment given to the music of the last century-and-a-half by the course structure of most university music programs, in which post-tonal theory is relegated (in the best-case scenario) to the final semester of required theory, a devastatingly short unit tacked onto a later semester of tonal theory, or, worst of all, to exclusively elective courses. Some theorists, such as Michael Buchler, put this rather elegantly:

> We aren't generally accorded much time to introduce twentieth- and twenty-first-century music to our undergraduates. So when we arrive at the unit (or, if we're fortunate, the semester) on "new" music, we need to be efficient with our time and should keep our eyes and ears on the ultimate prize: leaving students so enamored with at least part of the atonal repertoire that they want to perform it and study it further.[1]

Kulma and Naxer make a similar point, noting that while music—and by necessity the theoretical tools we need to understand it—is constantly evolving, "the breadth of tools and repertoire introduced to undergraduates has not changed alongside it," and that "to prepare our twenty-first-century students for their future as well-

1 Buchler (2017).

rounded musicians, we need to give them more musical tools and expose them to more repertoire."[2]

Sam Richards concurs, writing that "we should strive to offer students a more complete musical perspective. Few of our graduating professional musicians operate within spheres where such a narrow focus on music of the Western classical tradition is warranted . . . it teaches too much about too little."[3] Essentially, in our often myopic focus on ensuring the fluency of our students in the details and nuance of common practice tonality, we lose sight of the fact that many topics are applicable to musics outside of that sphere, and should be taught as such.

These observations lead to the second recurring sentiment in the literature surrounding the teaching of post-tonal music, which is the seeming consensus that undergraduate students approach post-tonal music with a lack of interest, apprehension, fear, pre-programed distaste, disdain, or a combination of all of the above. Many a pedagogical article begins with a nod to this very notion:

> For the most part, these students will have been minimally exposed to post-tonal music . . . the little they know about it, often through hearsay, is they don't, or won't like it, that it's different (translate as weird), incomprehensible, and not exactly pretty. In other words, we face a clear disconnect between post-tonal music and our present-day core students.[4]

Put another way:

> Undergraduate music students often demonstrate limited interest in contemporary art music. Many have communicated the perception that contemporary music is esoteric and inaccessible, dominated by levels of virtuosity they have yet to develop, extended techniques they cannot imagine mastering, and tendencies toward cacophonous dissonance they find off putting.[5]

I propose, in agreement with the above, that these attitudes are caused, at least in part, by a lack of exposure[6] to post-common-practice repertoire, especially in an

2 Kulma Naxer (2014).

3 Richards (2015).

4 Roig-Francolí (2017, 36).

5 Dean (2015).

6 Though certain students—classical saxophonists, percussionists, and some brass musicians, especially—may actually be *more familiar* with this music on day one than they are with that of "the canon," and my suggestions can help make music theory feel more relevant to their studies. This is the same as the supremely valid argument for including more examples of jazz (and other vernacular and Non-Western genres) into the curriculum: everyone should feel that what is being studied can apply to *their* music.

academic setting, and by an otherization of post-tonal and non-tonal music brought about by separating it entirely from tonal repertoire in the music theory classroom. I posit that music theory instructors can ameliorate these attitudes somewhat —and give themselves more time to teach post-tonal repertoire—by consciously integrating art music examples from the 20th and 21st centuries throughout the early semesters of music theory.

This achieves several goals. First, by using classroom examples drawn from the post-tonal era, we can make it clear that many of the topics and analytical techniques that we teach in the undergraduate theory classroom are applicable to more than just the repertoire of one era or style (for instance, the broad applicability of counterpoint and contrapuntal techniques to 20th Century and vernacular musics). Second, rather than implying a 4:1 (or similarly imbalanced) weighting of importance between the study of tonal and post-tonal musics, we place post-tonal music on the same (or marginally more even) level of academic importance that we assign to tonal music. Third, we can engender an earlier appreciation for music of the post-tonal era by giving students the means to interact with contemporary repertoire immediately in their collegiate studies. Last, but certainly not least, we give ourselves more opportunities to include repertoire from a truly diverse body of composers, and to do so in a way that embraces true diversity, rather than simply finding "diverse" examples that continue to prop up the Euro-centric model currently employed at many universities.

As a note: for the purposes of this paper, I will focus solely on instances where pieces drawn from the *art music* tradition of the 20th and 21st centuries may be used to aid in the instruction of undergraduate music theory. While I strongly believe that the use of examples from the repertoires of jazz, pop, rock, hip-hop, theater music, folk music, and world music can achieve many of my stated goals, in service of keeping my research focused and of an achievable scope, I have decided to limit my explicitly outlined examples to those from the art music tradition.[7]

II. Text Survey and Methodology

The music theory curriculum that I, and many reading this, experienced was, and is, one that relies overwhelmingly, if not exclusively, on the music of dead European males who wrote in a specific and narrow range of styles over the course of a little over 100 years. In her chapter of the *Norton Guide to Teaching Music Theory*, Ellie

7 Ideally, *every* example outlined in the following pages (and most, if not all, other topics) would be accompanied by examples from world and vernacular musical styles.

Hisama recounts that her first exposure to the work of a female composer in the theory classroom came during an upper-level elective course in the form of Ruth Crawford's *String Quartet 1931*. Hisama notes that after being introduced to Crawford's music, she became aware that she had never encountered music by a non-white composer in a classroom setting either; an absence mirrored on concert programs.[8]

When she elected to write her dissertation on works by Ruth Crawford and Marion Bauer, Ellie Hisama did so to upset the canon deliberately, "whether or not [her] work was of interest to potential employers."[9] As it did for Hisama, and many others, the catalogue of examples commonly utilized in the music theory classroom has the potential to leave students with the impression that this—the music of the white males of "the canon"—is the only music worthy of serious academic scrutiny. Recent (and often not-so-recent) scholarship has magnified the need to diversify the music we use to teach music theory, including music by women composers, composers of color, LGBTQIA+ identifying composers, composers of non-European or American descent, living composers, and examples and topics from outside the sphere of art music as it is traditionally defined.

Cara Stroud, in discussing the challenges of expanding the examples used in teaching to include those by female composers, writes that "I want all of my students, especially those who are members of under-represented groups, to feel welcome . . . and I feel it is valuable for all of my students to see and hear music from a diverse range of composers." She makes special note of "the vital importance of presenting work by women composers for all students" in order to "provide role models for women students [and to] encourage all students to expand their concepts of femininity and masculinity."[10]

Stroud's essay begins with an acknowledgement that despite her best intentions to present "repertoire from multiple genres, genders, and ethnicities"[11] her own teaching, like that of many if not most theory professors, falls short. For many topics in music theory, examples by female composers are not readily available and faculty often lack the time to effectively incorporate them into their curricula, though, as Stroud notes, the website "Music Theory Examples by Women"[12] and other

8 Hisama (2018, 253).

9 Ibid., 254.

10 Stroud (2018).

11 Ibid.

12 https://musictheoryexamplesbywomen.com/

resources have made a tremendous impact on this front. To make up for the lack of time to prepare, and other issues surrounding the diversification of classroom examples, Stroud suggests a number of strategies to confront the imbalance. Though her article focuses on diversification by gender, three issues—canonical thinking, accessibility, and tokenism—and her solutions,[13] are easily applied to other spectra of diversification, including my efforts to bring the music of the 20th and 21st centuries into the classroom during the early semesters of music theory.

Canonical thinking, Stroud writes, is the "tendency to go back to the same limited set of classic teaching examples from year to year."[14] While this saves time, it also leads to stagnation, and stands firmly in the way of diversification. Stroud suggests incorporating at least two works by women composers per semester. Like my efforts, this is easier to achieve with some topics than others, as illustrated by Stroud's difficulty in finding a "pedagogically useful sonata example."[15] To overcome this, she suggests identifying from the outset which topics are specific to a certain time-period, making finding an example by a woman less likely. This solution—identifying topics that are present across a broader spectrum of time[16]—is the same one that I propose to use in introducing more contemporary examples into the undergraduate theory classroom. These two efforts—and efforts to diversify by race and ethnicity, such as those proposed by Hisama—will often, and deliberately, overlap.

In his "Ten Tips for Teaching Post Tonal Theory," Joseph Straus begins with the pronouncement to teach "less theory, more music."[17] In the context of his "Ten Tips," Straus means that the instructor of a post-tonal theory course should spend less time on the minutiae of individual theoretical constructs and more on introducing repertoire and discussing individual concepts in that context. This is a rule that I feel is broadly applicable to the teaching of music theory in general. The topics introduced in the first semesters of the undergraduate curriculum are often ones treated with abstraction, not repertoire. The concept of pitch, for instance, is often taught through the use of keyboard diagrams and discrete "name the pitch" exercises. As I will address later, this is a prime opportunity to teach what is often the very first topic of music theory

13 Stroud (2018).

14 Ibid.

15 Ibid.

16 Ibid.

17 Straus (2018, 79).

with examples of contemporary music. Straus also recommends "diving straight"[18] into post-tonal repertoire when students reach that specific course/unit. Introducing some of that material/repertoire early on serves to offer students the chance to "dip their toes in the water"[19] at a more appropriate time.

For the purposes of this study, I will draw on insights from the previously referenced research in order to craft sample lessons and exercises that demonstrate the applicability of my central premise. Additionally, I will use textbook Tables of Contents to identify topics common to the early semesters of music theory, operating under the assumption that programs tend to roughly follow the progression of their chosen text. The five texts that I used for this survey are: Laitz's *The Complete Musician*, Kostka, Payne and Almén's *Tonal Harmony*, Burstein and Straus's *Concise Introduction to Tonal Harmony*, Clendinning and Marvin's *Musician's Guide to Theory and Analysis*, and Aldwell, Schachter and Cadwallader's *Harmony and Voice Leading*. While not the only texts used in the teaching of undergraduate theory, they are frequently utilized in crafting course design and as resources from which to draw pre-fabricated examples.

These texts show considerable similarity in their introductory material, beginning with facets of pitch and rhythmic notation, intervals, meter, major and minor keys, and triads and seventh chords. Following this, there is some variation in detail and the ordering of topics, with modes being introduced early on in the Clendinning/Marvin, and Kostka/Payne/Almén moving quickly into triads and inversions while the other texts begin with two-voice counterpoint. Regardless of subtle differences, these texts all cover a similar breadth of topics in their chapters on tonal music and topics. An additional similarity is that, with the exception of Clendinning and Marvin's *Musician's Guide*, no example of 20th century/post-tonal art music is introduced prior to units dedicated to that subject, though all of the texts manage to use at least a few examples from jazz, rock, pop, musical theater, etc. to illustrate various ideas.

With each of these common topics—compound melody, for instance—I will ask several questions. First: is the topic exclusively relevant to common practice/functionally tonal music? If so, I will, for the time being, relegate that topic to future research. Next: are there pieces from the 20th or 21st centuries that spring quickly to mind for the teaching of that topic?[20] Are any of those pieces by female, non-white,

18 Ibid., 86.

19 Ibid., 86.

20 This question is designed to show that it is possible for the instructor to mitigate the time requirement of finding their own new classroom examples, though I encourage the use of those that I outline, since that saves even more time.

or LGBTQIA+ identifying composers?[21] Are any of these pieces for under-represented ensembles, instruments, or media (such as saxophone, euphonium, percussion, guitar, wind band, electroacoustic music, improvisatory music etc.)? These questions serve to guide both the choice of topics and the choice of repertoire within each topic.

III. Application

The following topics, while by no means exhaustive even of those covered in fundamentals units, are designed to demonstrate the benefits and ease of applying this research. The topics of compound melody and invertible counterpoint are included to show that these concepts can be applied outside of fundamentals units as well, as these are topics generally covered in later semesters (often the second or third) of music theory or even in non-core/elective courses such as tonal counterpoint.

It is worth noting here that this research is intended as a first step, not only in that this paper primarily covers fundamentals topics and is intended to be followed by additional research addressing topics of harmony and form, but also in the sense that this research is meant as an interim step towards true curricular redesign. Choosing new classroom examples is an action that instructors can take regardless of their authority to change the broad structuring of the music theory curriculum (junior faculty and graduate assistants for instance) and is one that can be taken quickly and with relative ease.

That the standard curricular structure is one rooted in systemic white/male supremacy has been well established.[22] This has been a matter of considerable recent discussion, and is likely to remain so for some time. The prevailing four/five semester theory sequence is one with considerable institutional inertia behind it, and reshaping this curriculum is going to be time-consuming and difficult, though several institutions have already begun this work, including Harvard[23] and the University of Dayton.[24] Courses will need to be re-designed from the ground up; new classroom

21 In these cases it is important to make discussion of the composer's identity part of the instructional process. This can be as simple as a brief introduction of the composer that emphasizes their identity ("This piece is by Ursula Mamlok. She was a German composer who came to America to flee the Nazis. Her music was heavily inspired by the composers of the Second Viennese School.") or can become a more intensive part of the discussion (as I suggest in the case of Barber's sexuality as a topic in his *Despite and Still*).

22 See especially Ewell (2020).

23 Robin (2017).

24 Acavedo and Rush (2020).

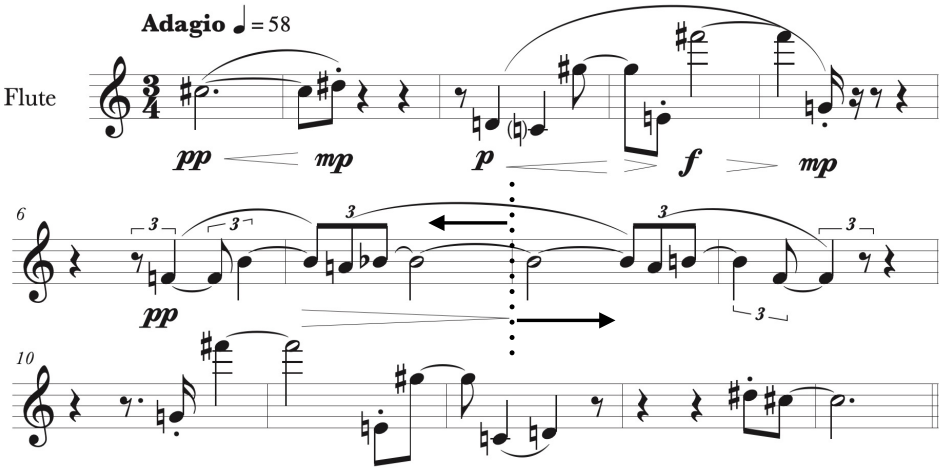
examples, homework assignments, and exams will be developed; and new textbooks will need to be written. Efforts like Molly Murdock's Music Theory Examples by Women project, that of the Composers of Color Resource Project,[25] and, in its own small way, my research, can serve as stepping stones to a truly diverse, antiracist, and anti-sexist curriculum, and, as long as the examples chosen do not simply continue to reinforce the artificial supremacy of "the canon," can continue to be useful in that new curriculum.

1. Pitch

The very first topic taught in most, if not all, undergraduate music theory courses is the concept of pitch. This topic is almost always covered via the use of keyboard diagrams, artificially-constructed examples, or with simple musical examples drawn from Western folk traditions and the repertoire of canonical composers. Given that one of the primary goals of collegiate music theory instructors is (or should be) to teach the subject with an expanded (or destroyed) canon, this choice is an obvious mis-step. Since our goal is to introduce students to the basic concepts of pitch and pitch-class, there is no end to the possible pieces we might use to teach them. A logical choice would be to use a piece of 12-tone music, a spectralist piece, or even a texturally-driven piece of contemporary repertoire, since these pieces are more likely to contain all twelve chromatic pitches in a relatively short excerpt.

The palindromic theme to Ursula Mamlok's *Variations for Solo Flute* (see Example 1), can be quite easily understood by students at the very beginning of their theoretical studies. More than being an example that is "just as good" as one from the tonal repertoire, the Mamlok offers unique advantages and sends a powerful Day One Message to students: that the music theory classroom in one that values the music of women composers, intends to engage with diversified repertoire, and intends to challenge its students in ways that apply even the most basic concepts to complete pieces and requires them to demonstrate and utilize critical thinking skills.

25 https://composersofcolor.hcommons.org/



Example 1 .
Ursula Mamlok, Variations for Solo Flute, mm. 1–14, with annotations showing point of inflection.
(Reproduced by arrangement with Mcginnis & Marx Music Publishers, Copyright Owner.)

Considering a backward design approach to using this piece as a classroom example, we must first clarify our objectives. Since our primary aim here is to create fluency in the identification of pitch, our first objective might be stated like this:

> **Objective 1:** Students will correctly identify all pitches in the theme to Mamlok's *Variations for Solo Flute*.

This objective is simple enough, though it is no different than the same objective as directed towards any piece from the tonal repertoire. The beauty of using Mamlok's *Variations* on day one (or day two, depending on how long syllabus discussion takes) is that it demonstrates *why* we study music theory by allowing students to discover something important about the piece using the most basic of theoretical concepts. Therefore, our secondary objective would be stated as:

> **Objective 2:** Students will diagram or articulate the form of the theme to Mamlok's *Variations for Solo Flute* based on the palindromic pattern of pitch presentation.

Next, we ask how we know whether or not we have achieved our objectives. The assessment of our first objective is simple enough: students will write pitch names beneath each note of the theme on a provided copy of the score (Example 1). Students will compare their solution to that of their neighbors in class and to the instructor's solution.

For our second objective, the assessment is similarly low-stakes and matches the objective word for word, though this assessment may be more detailed (i.e., "Students will draw an inflection point on the score and write a sentence describing the form of the theme") if desired. The classroom activity to achieve this objective is likely to be more in-depth than that of the first objective. I would propose a "Think - Ink - Pair - Share" activity. Students will take between 30 seconds and one minute (while a recording plays) to consider the form of the piece (Think) and will then write a sentence or two to organize their thoughts (Ink). Next, for one to two minutes, students will confer with their neighbors (Pair). During both of these phases, the instructor should walk around the room and question/prod students/pairs in the direction of completion, paying particular attention to students who show signs of concern, confusion, or inattention.

Following pair discussion, the instructor can call on any given student or pair to share their thoughts, inviting alternate interpretations or additional observations as may be pertinent. Students can even be called to the front of the room to share their diagrams or to add an inflection point to the instructor's copy of the score (as is shown in Example 1). At this point the instructor may ask students to discuss how understanding the palindromic structure of the theme might influence how they would play it, and whether or not this answer in different from how they might sight-read the piece.

Following discussion, a final listen-through of the piece, with newly oriented ears, will help students cement their understanding of the piece. As students progress through their semesters of theory, they will eventually grasp the importance of individual lessons on their own, but for such an early lesson the instructor should point out that students have accomplished something special: using nothing but an understanding of pitch, they have made important analytical observations about a piece of contemporary literature.

Mamlok's *Variations* is an ideal piece for many reasons, and can be revisited when discussing the inversion of intervals, theme and variations, and several other topics. While any number of pieces from the 20th and 21st centuries can be used to illustrate pitch, pieces *driven* by pitch/motive, especially those for a for a single instrument (or an extracted part from a chamber piece), are ideal, since they remove the confusion of multiple lines. Several other potential pieces are listed below in Example 2.

Composer	Titile	Additional Topics/Diversity
Crawford, Ruth	*Diaphonic Suite, no. 1*	Female composer, historical significance
Hindemith, Paul	*Viola Sonata*	Alto clef reading
Ligeti, György	*Sonata for Solo Cello*	Alternating treble, bass, tenor clefs
Noda, Ryo	Numerous solo saxophone works	Under-represented instrument, Asian composer
Riley, Terry	*In C*	Minimalist, historical significance, pitch driven
Tower, Joan	*Wild Purple*	Alto clef reading, female composer
Varese, Edgard	*Density 21.5*	Historical significance, motive driven

Example 2.
Suggested Repertoire for the introduction and assessment of pitch identification.

2. Keys and Scales

Keys, key signatures, and scales are often grouped together as topics in the first semester of music theory, which is why I have grouped them together here. Keys and key signatures, however, are topics that fail the test presented by my first methodological question: they *are* exclusively tonal phenomena (or at least exclusively tonal in a functional sense). There are certainly examples from the 20th century that could be used to teach these concepts—compositions by Arnold Bax, Harry Burleigh, Samuel Coleridge-Taylor, William Grant Still, Gustav Holst, Maurice Ravel, Germaine Tailleferre, etc. come immediately to mind—but would be used in the same manner as examples from the common practice era, and so do not merit detailed illustration here as did the example for the teaching of pitch. The primary consideration for using 20th century pieces *here* is that there needs to be an easily recognizable tonic center, since we often accompany the teaching of these pieces with a "sing tonic" exercise. If students can't quickly recognize tonic in the selected piece it is either not truly tonal, or is too complex for inclusion in a first semester course. Example 3 presents a selection of pieces that could be used to teach key signatures. Since these are tonal pieces, an instructor would be well served to pick a piece that can be utilized later in the first or second semester to teach additional topics (some potential possibilities are also listed in Example 3). Many of the pieces used to teach key signatures can also be used to teach major and minor scales, though even pieces with a quickly identifiable tonic from the 20th century are often highly chromaticized, somewhat limiting their usefulness in that respect.

Composer	Title	Additional Topics/Diversity
Bax, Arnold.	*In a Vodka Shop*	Asymmetric meter
Beach, Amy	*Symphony in E minor*	Female composer, orchestral texture, Cadential 6/4, various formal topics
Burleigh, Harry	*From the Southland*	Black composer, numerous harmonic and formal topics
Holst, Gustav	*First Suite in E- Flat*	Chaconne (1st movement), Ternary form (2nd movement), wind band literature
Milhaud, Darius	*La Creation du Monde*	Dorian mode, jazz influence, syncopation, motivic development
Price, Florence	Symphony no. 1	Black female composer, orchestral texture, numerous harmonic and formal topics
Still, William Grant	*Afro-American Symphony*	Black composer, jazz influence, orchestral texture
Tailleferre, Germaine	*Berceuse*	Female composer, cadences, modulation, specific harmonies

Example 3.
Suggested repertoire for key signature identification.

While my ultimate goal is not to immediately upset the *status quo* insofar as it pertains to the actual topics included in beginning theory courses, when it comes to the teaching of scales, I have to make an exception. Once we introduce the major scale and the patterns of half/whole steps that comprise it, it makes logical sense to ask, "what other patterns can we use? Why not all whole steps?" Introducing the chromatic, pentatonic, whole tone, and octatonic scales alongside the major and minor scales and church modes makes sense, as long as we do so in a limited fashion. Since these scales serve as crucial elements of much of the contemporary music that students may encounter relatively early in their performance studies (Ives, Debussy, Stravinsky, Bartók), early exposure to them encourages deeper engagement with this repertoire over time.

Clendinning and Marvin's *Musician's Guide* introduces the church modes alongside major and minor scales. Doing so not only removes the privilege enjoyed by tonal music created by giving exclusive treatment to major and minor scales, but also opens the door to engaging with a wider variety of repertoire in discussing melodic and motivic design (an important first step into "real music" following the first batch of fundamentals). Clendinning and Marvin offer two examples from the 20th century: Bartók's "In Lydian Mode" from *Mikrokosmos* and Holst's "Fantasia on the Dargason" from the *Second Suite in F* for Military Band. These are excellent pieces, and certainly worthy of inclusion in discussion of church modes. Other pieces abound, particularly in jazz, folk, and world musics (which are outside of the purview of this essay).

A sensible approach to briefly introducing the whole tone and octatonic scales to first-semester undergraduates would be to discuss these scales in relation to the pattern of half- and whole-steps in the major scale. As I mention above, the question of "why not all whole steps?" is a logical follow-up to the major scale. An example, such as the perennial Ives favorite "The Cage" can be utilized not only to demonstrate the structure of the whole tone scale and its ability (in this context at least) to avoid the creation of a pitch center, but also, with a discussion of text setting, can demonstrate why a composer might choose to utilize this scale. "The Cage" is so frequently used in post-tonal theory classes because it is such a clear and straightforward example, and it is for precisely that reason that it lends itself to being used in an earlier undergraduate course, freeing the instructor of the exclusively post-tonal course to engage sooner with more complex examples.[26] As with the Mamlok, this lesson is designed with multiple (in this case, three) objectives:

> **Objective 1:** students will build the whole tone scale by extracting it from "The Cage."
>
> **Objective 2:** students will, using their knowledge of enharmonic equivalence, articulate an understanding of the limited potential transpositions of the whole tone scale.
>
> **Objective 3:** students will discuss the implications of the text and formulate hypotheses as to why Ives chose the whole tone scale.

I would conceive of this activity as coinciding with a discussion of church modes. Once students have confidence in identifying/constructing modal scales, and can find the patterning of whole- and half-steps in them, the instructor will tell students that it's time to learn another scale.

The lesson begins aurally. After listening to a recording of the piece, the instructor will ask students to sing its tonic. They will at this point, of course, fail, or at least sing a variety of viable "tonics." Why, the instructor will then ask, can the students not identify tonic? The score will then be presented and students will be asked to build the scale by extracting it from the piece and to write in the types of steps included. Again utilizing the "Think – Ink – Pair – Share" strategy, the instructor will initiate a discussion on the structure of the scale.

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26 This also saves time down the road, removing the need for the instructor of a Post-Tonal Theory course to engage with the concept of the whole tone scale or with this piece. This is the sort of "toe-dipping" that Joseph Straus stresses there isn't time for in a dedicated Post-Tonal unit/semester. There *is* time for it in Theory 1.

Next, students will attempt to make as many transpositions of the scale as possible. This is, once again, an invitation to failure, as there are only two possibilities. This step can be fairly cursory, as a discussion of even and odd collections, while not beyond the scope of an introductory course is potentially overly time-consuming; nonetheless it is important that students realize the limited transposition possibilities of the scale.

The critical thinking portion of this activity comes next, again, seeking to bring the students to a deeper understanding of a post-tonal work with fairly basic analytical tools. The instructor will present the text in isolation and ask for a volunteer to read:

> A leopard went around his cage
> from one side back to the other side;
> he stopped only when the keeper came around with meat;
> A boy who had been there three hours
> began to wonder, "Is life anything like that?"

Students will then take part in an open discussion of the mood implied by the poem, with the instructor nudging students towards ideas of futility, repetition, etc. as necessary. The students will quickly realize at this point that a scale that never really settles down is perfect for this text.

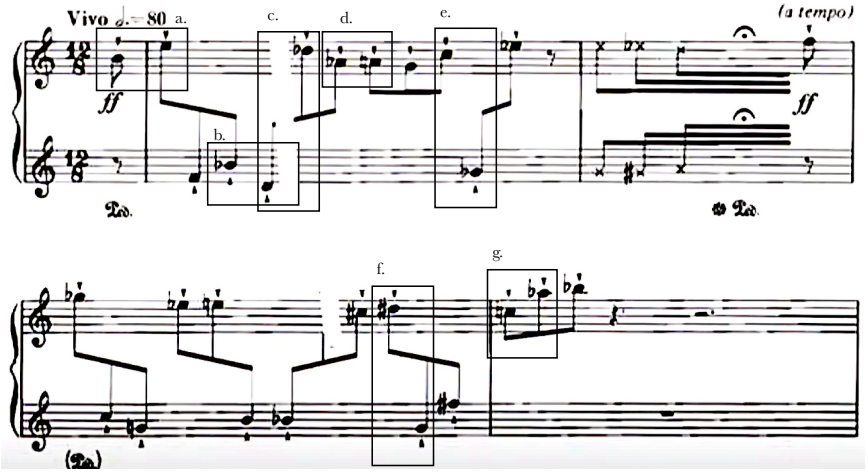
3. Intervals

With pitch and scales under our belts, we turn now to intervals. As with pitch, we can use almost any piece for this purpose, making it once again an opportune moment to introduce some diversity into our curriculum. The opening sections of Sofia Gubaidulina's *Toccata-Troncata*, the beginning of *Valeria* by Toru Takemitsu, or any of the innumerable other pieces from the last century characterized by large leaps would be excellent choices. Example worksheet exercises for the Gubaidulina and Takemitsu are shown below in Examples 4a and 4b.

(a) Sample Interval Worksheet Problem 1: *TOCCATA–TRONCATA* By Sofia Gubaidulinia

1. In the space below, identify each paired set of intervals in Sofia Gubaidulina's *Tocacta-Troncata* with direction and quality. Pay attention to clefs.

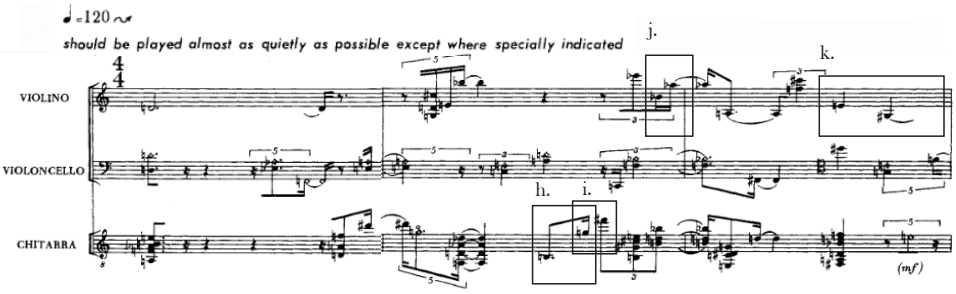
a. _____ b. _____ c. _____ d. _____ e. _____ f. _____ g. _____



(b) Sample Interval Worksheet Problem 2: *VALERIA* by Toru Takemitsu

2. Identify the specified intervals in the following excerpt from Toru Takemitsu's *Valeria.*

h. _____ i. _____ j. _____ k. _____



Example 4 .
Sample Interval Worksheet Problems.

For a longer lesson example, we again look for a piece where the understanding of a single concept—in this case, that of intervals—can lend insight to the understanding of an entire piece. For this topic my mind instantly gravitates to the "Prologue" from Lutosławski's *Muzyka Żałobn*a (Funeral Music). The limited horizontal interval content will allow for quick pattern recognition which can be extended to recognition of pitch and rhythmic patterns as well. Using this piece also allows the instructor to introduce another monumentally important composer to students several semesters early, once again building a base of repertoire awareness that would otherwise be lacking.

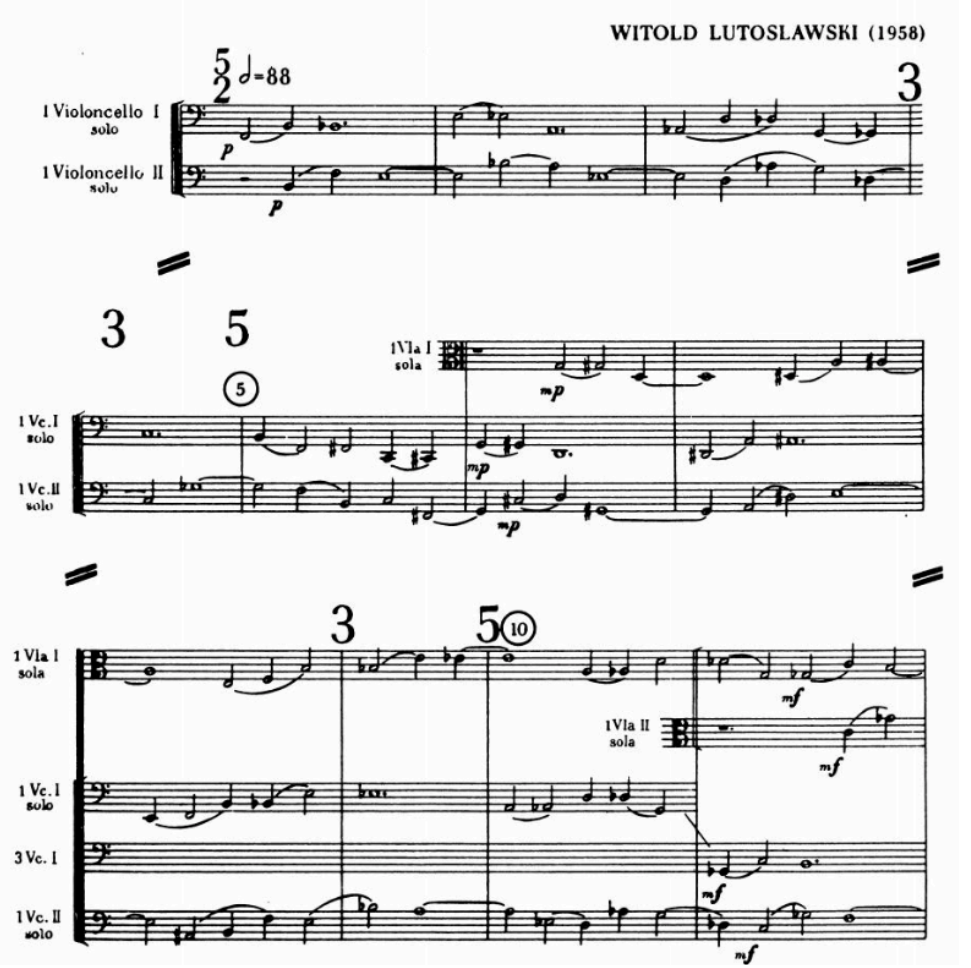
As with the other pieces, there is a limit to the expectations an instructor can have for their students in approaching a piece like this in their first semester of study, but we can still realize a number of objectives:

> **Objective 1:** Students will identify the pattern of horizontal intervals used in the first and second cello parts of Lutosławski's *Muzyka Żałobna*.
>
> **Objective 2:** Students will discuss any additional pattern they may observe in *Muzyka Żałobna*.

While the first of these two objectives is critical, the second is included to leave the door open to student observations regarding pitch ("all 12 chromatic pitches are used before any are repeated") or rhythm ("there's a pattern to the rhythm, but it doesn't start where the pattern of pitches starts") in order to demonstrate applicability of the topic. The 12-tone implications of the opening and the isorhythmic canon employed by Lutosławski are both beyond the scope of the usual Theory I curriculum, but, if they are observed regardless of that fact, the instructor can offer clarification and insight (or optional reading material) as they see fit.

Example 5 shows a model worksheet that could be used to achieve the first two objectives. The assignment would work well as either an in-class exercise or as a homework assignment with in-class discussion as a follow up. If used as an in-class exercise, this piece offers a good opportunity for students to sing difficult intervals. Assuming observations are made regarding the canon, the instructor can even divide students into multiple groups and sing a large portion of the prologue.

Instructions: analyze the melodic/horizontal intervals in mm. 1–10 of the first cello part of Witold Lutosławski's *Muzyka Żałobna* (*Funeral Music*). Compare these intervals to those in the other instrumental parts. Discuss your findings below.



Example 5.
Musique Funèbre By Witold Lutoslawski.

4. Rhythm and Meter

As a facet of music that can be divorced from tonality, the various aspects of rhythm and meter are obvious places to include musical examples from outside of the tonal canon. For any of the various subsets of rhythm and meter one can find classical (common practice) examples by women composers (Clara Schumann's *Piano Sonata* for syncopation) and black composers (many works by Samuel Coleridge-Taylor, for instance, exhibit frequent and pervasive syncopation as well), jazz artists (the entire Dave Brubeck album *Time Out* for complex meters), living composers, hip-hop artists, and from world music (Eastern European folk music, Latin American music, African drumming, Hindustani classical music, and Gamelan all contain useful and engaging metric components). Similarly, any number of pieces from the art music repertoire of the 20th and 21st centuries can be used to teach topics of rhythm and meter. These topics are myriad, but three are particularly amenable to illustration via 20th and 21st century examples: syncopation, hemiola/polyrhythm, and asymmetric meter.

4.1. Syncopation.

As with many of the subtopics that can be grouped together under the umbrella of rhythm and meter, any number of pieces from the 20th and 21st Centuries exhibit prominent syncopation. As with pitch, this is a ripe opportunity to use music by a composer from any of the underrepresented groups that we, as instructors, should endeavor to feature more prominently in our teaching. Example 6 suggests some possibilities for this topic; the list could be continued at great length.

Composer	Title
Andriessen, Louis	*De Stijl*
Dun, Tan	*Crouching Tiger Concerto*
Mackey, John	*Strange Humors*
Marquez, Arturo	*Danzon no. 2*
Mazzoli, Missy	*Holy Roller*
Milhaud, Darius	*La Creation du Monde*
Thomas, Omar	*Come Sunday*
Vila-Lobos, Heitor	String Quartet no. 4
Wolfe, Julia	*Believing*

Example 6.
Repertoire for introducing syncopation.

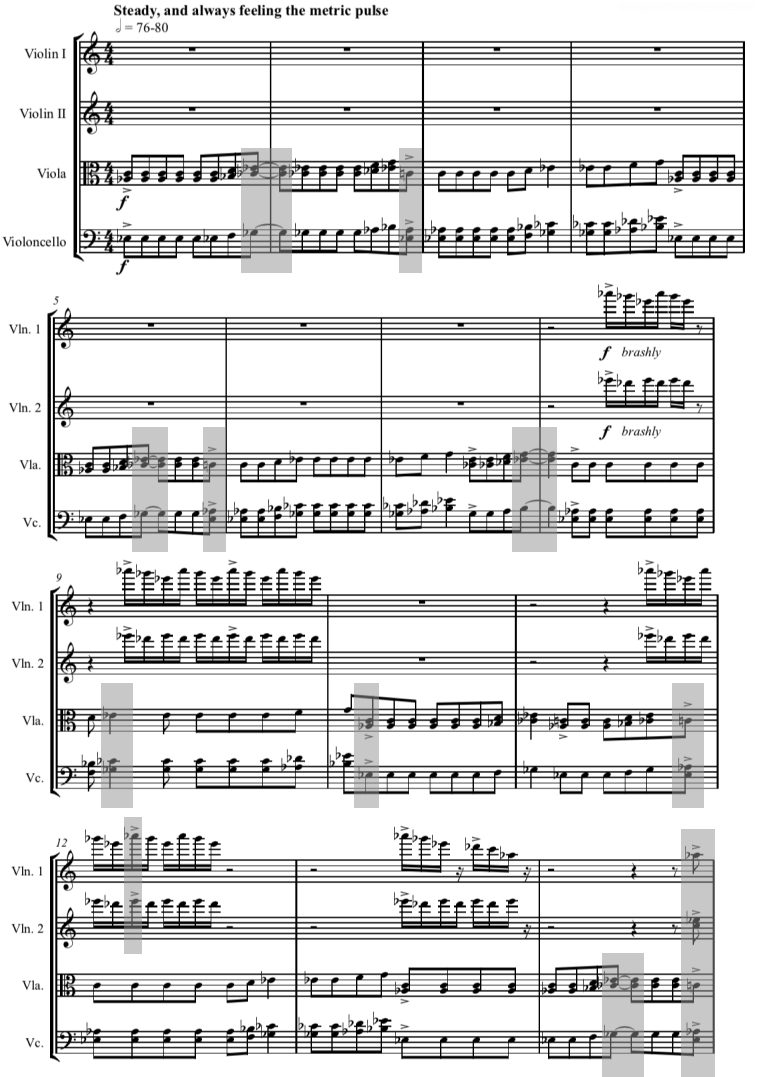
The learning objectives and process for any of these examples can follow the same template, which will look nearly, if not entirely, identical to the template to teach syncopation via canonical repertoire. Since syncopation is such a pervasive element of music, the door is opened with this topic to even the most recent music, particularly the beat-driven music of the minimalist and post-minimalist movements, and the music influenced by those movements (not to mention the jazz-influenced music of the early 20th century and the Third Stream). Judd Greenstein's *Four on the Floor* is an excellent example, as it bridges the worlds of classical and popular music, infusing vernacular sensibilities into a piece for string quartet and introduces students to a relatively young living composer at the forefront of the "Indie-Classical" movement.

Syncopation is a topic that is likely at least passingly familiar to most, if not all, students, regardless of background. Its pervasiveness in popular styles as well as in art music make it a topic that is both simple to teach, and easy to over-simplify. Syncopation is best understood as a rhythmic disruption of the regular metric pattern of a piece or section of a piece by means of displaced accents, which is not the same as defining syncopation as "accenting offbeats" as many students are inclined to do. Once we clarify terminology, our objectives are:

> **Objective 1:** Prior to being given a score, students will articulate their classification of the metric nature (simple duple) of the chosen passage of Greenstein's *Four on the Floor* and how syncopation is employed.
>
> **Objective 2:** Students will aurally identify instances of syncopation in the opening of Judd Greenstein's *Four on the Floor*.
>
> **Objective 3:** Students will annotate a score to show where they heard syncopation occurring and discuss any instances of syncopation they may have identified in the score that are not aurally apparent (or *vice versa*).
>
> **Objective 4:** Students will discuss the effect of Greenstein's application of syncopation.

As should all lessons pertaining to metric topics (and most related to pitch as well), this lesson begins aurally, with students listening to a passage of Greenstein's piece from mm.1-14 (seen below in Example 7). After listening, students will be asked to classify the piece's meter, which is, in this case, simple duple (4/4). Having classified the meter, students will articulate in the manner of their choice where prominent syncopations are located; students could, for instance, sing the first measure of the viola part or articulate their thoughts verbally ("most of the syncopations are on

the and-of-two or the and-of-four"). On a second listen through, either to reinforce previously articulated thoughts or to spur some more focused initial thoughts, students can show their understanding by physically gesturing (i.e. raising their hands) every time they experience syncopation.



Example 7.
Judd Greenstein, *Four on the Floor*, mm. 1–14, with annotations showing significant (though not all) occurrences of syncopation.

For the third objective, students will be given a physical score and asked to highlight, circle, or otherwise annotate occurrences of syncopation. Students should be instructed to look for instances of syncopation beyond the ones that they identified solely by ear. Students will likely identify notes tied from the 'ands' of two and four to downbeats as syncopation, but may not immediately identify accented notes on beats two, four, and their offbeats as additional occurrences of syncopation. Finally, a discussion should be initiated regarding the affect created by Greenstein's use of syncopation. Students may key in on the name of the piece as a reference to a drum pattern found in popular music as a starting point for this discussion.

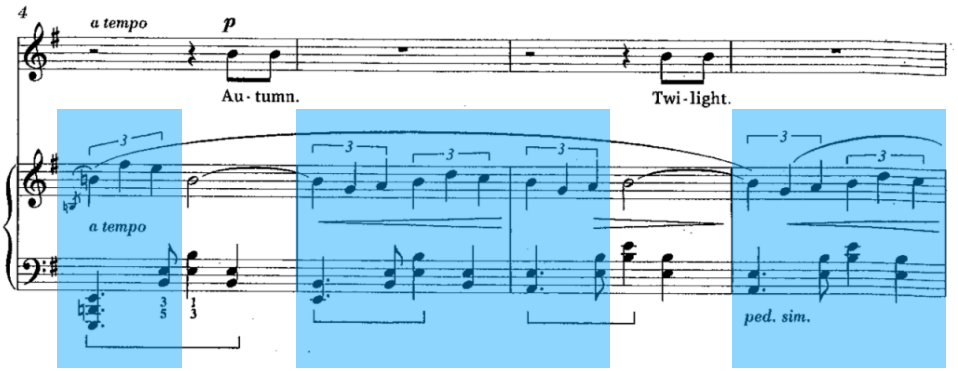
4.2. Hemiola/Polyrhythm

Hemiola, like syncopation, is one of the metric topics almost always explored by common texts. Examples of hemiola in the art music of the 20th and 21st centuries are numerous. Two particularly good examples, with which I will illustrate a sample lesson, are Samuel Barber's "Solitary Hotel" (from his song cycle *Despite and Still*), and "Flowers" from Julia Wolfe's Pulitzer Prize-winning composition *Anthracite Fields*. The example from *Despite and Still* will be introduced aurally, while Wolfe's piece will be paired with the score when introduced. The objectives for the lesson are:

> **Objective 1:** Students will sing the pervasive hemiola present in Barber's "Solitary Hotel" based on their listening.
>
> **Objective 2:** Students will transcribe the rhythms of Barber's hemiola.
>
> **Objective 3:** Students will discuss the effect of hemiola in "Solitary Hotel" and its relation to the text of the song.
>
> **Objective 4:** Students will identify the hemiola of "Solitary Hotel" on the score.
>
> **Objective 5:** Students will highlight instances of hemiola in Julia Wolfe's "Flowers."
>
> **Objective 6:** Students will discuss the effect of hemiola in "Flowers" and its relation to the text.

Predictably, this lesson begins with listening. After introducing the concept of hemiola in the abstract, and having students sing or clap patterns of 2:3 or 4:3, they will listen to a recording of "Solitary Hotel" with the instruction to listen for a similar

pattern. The contrast of triplets against a *habañera* bass (see Example 8) is pervasive and should not present great difficulty to identify. After several times through, the instructor will divide the class in half and ask the students to sing the two rhythms while conducting in four. If necessary, students can sing along to the recording. Once this is done, they should be able to transcribe the rhythms that comprise the hemiola. That done, they then can be provided with the score and instructed to circle/highlight all instances of hemiola. An optional step at this point would be to have students discuss the affect of the hemiola and its relationship to the text, which in this case highlights the disconnect that the narrator feels to the revelry of the rest of the hotel's occupants. Discussion of the entirety of the text, and the possible reading of it in terms of Barber's homosexuality, is also a worthwhile endeavor at this point.

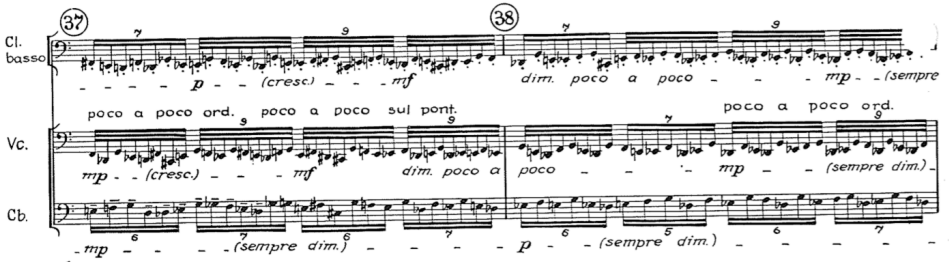


Example 8.
Samuel Barber, "Solitary Hotel" from *Despite and Still*, mm. 4–7 with annotations showing occurrences of hemiola: 3 (in the right hand) against 2 (in the left hand).

The second example, Julia Wolfe's "Flowers," exhibits near constant hemiola in the accompaniment, though it is considerably less singable than the Barber. Students will be given the score (almost any portion of this movement will work) and asked to follow along with a recording, circling or otherwise marking occurrences of hemiola. Students can then discuss how the metric destabilization of the hemiola amplifies the perpetual motion of the singers listing all of the flowers grown by the miners. Potential observations might include how the churning rhythms represent the constant work required by mining communities and the monotony thereof, how gardening offers escape from that same labor, or how the hemiola, like the listing of flowers, induces

a somewhat trance-like state. That *Anthracite Fields* is a Pulitzer Prize-winning composition by a female composer should not go without mention.

Time permitting, the instructor can offer an addendum to discussion of hemiola by introducing the broader concept of cross-rhythm/polyrhythm. Students will eventually encounter non-hemiola polyrhythm in their aural skills work, and, if they have encountered it before, are more likely to grasp the necessity of the topic, despite its difficulty. Here, we must offer a shorter lesson, which serves more as a sneak-peak than a fully-fledged topic. Like the early introduction of synthetic scales, the subject of polyrhythm is likely to arise through student questioning ("if we can do 2:3, why not other ratios?"). Having an example at the ready will allow for a brief introduction to the topic. The third movement of György Ligeti's *Chamber Concerto* offers numerous instances (see Example 9) of polyrhythm. Our objective here is simple: to introduce students to the sound and appearance of a variety of polyrhythms. Performance of the polyrhythms is not necessary, but listening and visual identification can be beneficial. Again, like the brief foray into synthetic scales, a cursory introduction to polyrhythm can serve to ignite curiosity. A simple "listen and identify" activity is enough.



Example 9.
György Ligeti, *Chamber Concerto*, mvt. III, mm. 37–38

4.3. Asymmetric Meter

The topic of asymmetric meter fits naturally into the curriculum of a first semester theory course alongside discussion of simple and compound meters, though it is often omitted from both courses and texts, despite its usefulness given the increasing prevalence of such meters in contemporary repertoire, jazz, and popular musics (not to mention in world musics). As with other topics related to meter, much of our initial approach will be aural and the overall lesson can be designed around any

of a great number of pieces. In this case, the best examples will be those in which the meter is functional—that is, the meter signature accurately reflects the beat/accent structure of the measure rather than being chosen for the purpose of fitting in the correct number of notes—and pervasive—that is, the meter is used for a long enough period of time to be predictable.

For this topic a logical first step would be to introduce asymmetric meter with either a piece of world music (any number of examples from the Eastern European folk tradition[27]) or jazz (Dave Brubeck's *Blue Rondo à la Turk* being an ideal choice) before moving on to art music examples. Like other metric topics, the lesson plan and objectives for teaching asymmetric meter will look much the same from piece to piece, and will be illustrated below with Silvestre Revueltas' *Sensemayá* and the fugue from Heitor Villa-Lobos' *Bachianas Brasileiras No. 9*.

This lesson begins with *Sensemayá*, which is in a strong and regular 7/8 (2+2+3). Our objectives are:

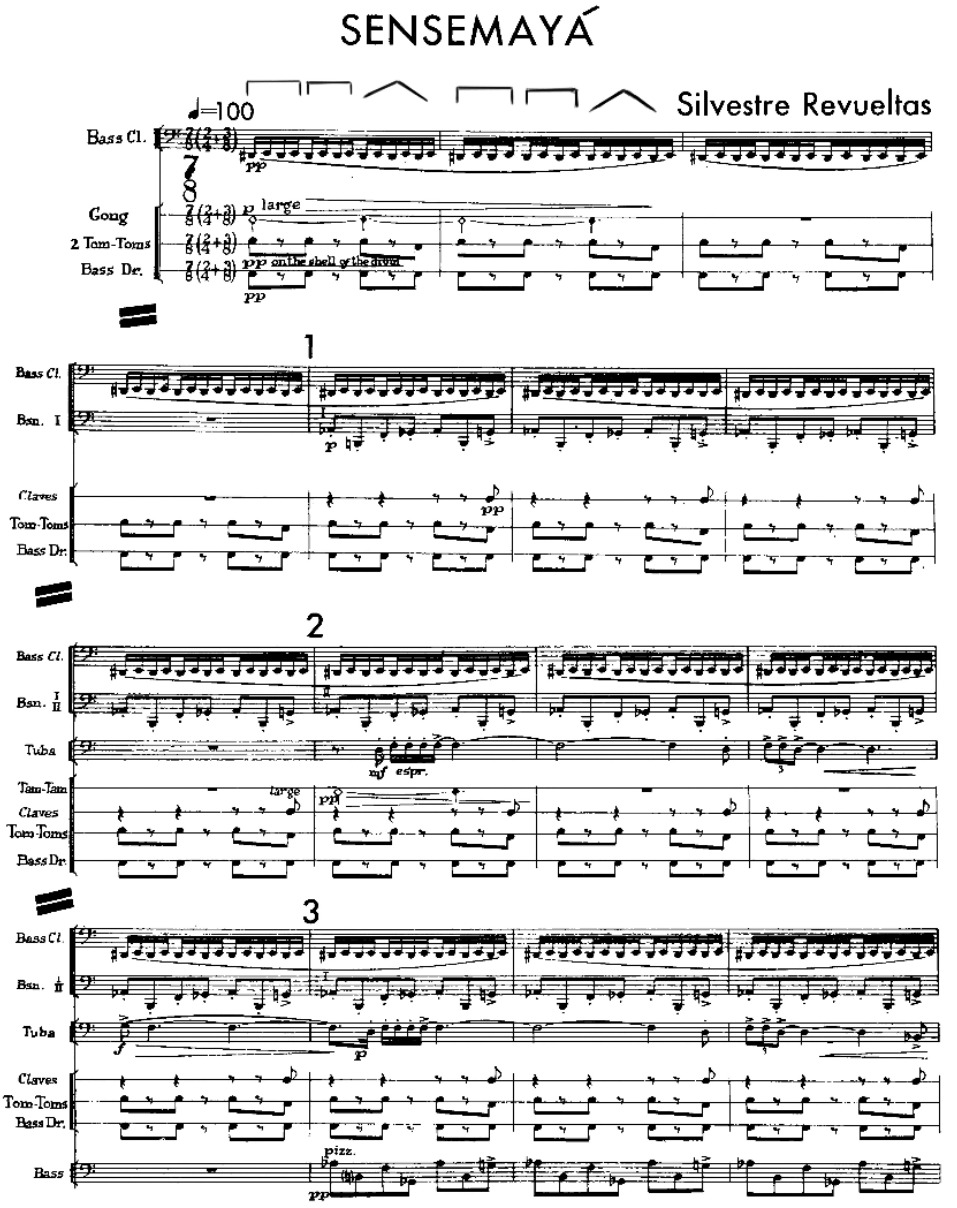
Objective 1: Students will aurally discover the meter of *Sensemayá*.

Objective 2: Students will diagram the beat pattern of *Sensemayá*.

The instructor will begin this lesson similarly to the syncopation activity (and many others related to meter), with students being told to try to conduct along with a recording. Instruct students to focus their aural attention on the percussion and bass instruments and conduct along once they think they've found the beat pattern. The instructor should offer the hint that the meter is unchanging. The first 10 measures or so should be enough to ascertain the meter. An appropriate excerpt is shown in Example 10.

After listening, particularly if students fail to find a meter that they can conduct, the instructor can ask leading questions such as "Is this piece in a simple meter? Compound?" If students have not already identified the 7/8 meter, this sort of question will push them to the realization that this piece is neither of the previously encountered metric varieties. At this point, several students will have hopefully grasped the asymmetry of the meter and are able to articulate their observations. If not, displaying a portion of the score absent time signatures may be necessary for the discovery process. Once asymmetry has been observed and diagramed (a possible diagraming solution is shown in Example 11), a broader discussion of asymmetric meter can begin. The entire lesson is much briefer if jazz or folk examples are used first to illustrate the topic.

27 Again, it is beyond the purview of this paper, but I highly recommend incorporating actual dance into this lesson. Tutorials are readily available online.

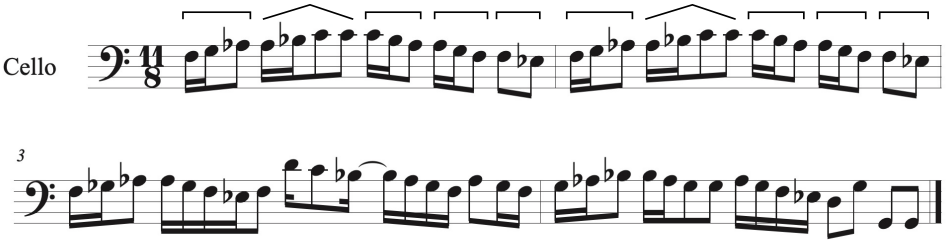


Example 10.
Silvestre Revueltas, *Sensemayá*, mm. 1–15, with 2+2+3 beat pattern diagramed.

Heitor Villa-Lobos' *Bachianas Brasileiras No. 9* might be taught in a slightly different manner. While the lesson can still begin aurally, it is likely too much to ask for students to discover the meter entirely on their own. Instead our objectives are:

> **Objective 1:** Students will diagram the beat pattern of the meter utilized in the fugue of Heitor Villa-Lobos' *Bachianas Brasileiras No. 9*.
>
> **Objective 2:** Students will sing beat patterns and conduct along with the recording of *Bachianas Brasileiras No. 9*.

Both objectives in this case are in service of students understanding the 11/8 meter of the piece. Students will be given the score and asked to follow along. After listening, they will be asked to diagram, in any way that makes sense to them (a possible version is shown in Example 11), the beat pattern of the meter, which is 2+3+2+2+2. Once diagramed, students will sing subdivisions and conduct along with the recording.



Example 11.
Heitor Villa-Lobos, *Bachianas Brasileiras No. 9*, "Fugue," with beat groupings diagramed.

5. Texture

Texture is another topic that is especially well suited to being taught with examples from the 20th and 21st centuries, since texture and timbre are major motivators of formal design or perception thereof in more contemporary music.[28] It is important that our coverage of texture encompass more than homophonic, heterophonic, polyphonic, and monophonic textures. Textural elements such as the presence of a soloist, the use of electronic voices (should an electronic voice used in conjunction with acoustic instruments be considered a drone, an accompaniment, or a contrapuntal equal? How do we define the number and type of voices in a work of pure

28 Lochhead (2005, 254).

fixed media?), spoken elements, non-instrumental sounds made by instrumentalists, etc. are important components of this topic, and are distinctions that can prompt significant and enlightening discussion. None of these distinctions take much time to make, and allow for a broader repertoire in general (jazz, world music, electroacoustic music, etc.) to be used in teaching the topic, particularly in the types of rapid-fire exercises often used to teach texture.

Composer	Title	Texture Type
Berio, Luciano	*Sequenza VII/VIIb*	Biphonic/debatable
Eastman, Julius	*Stay on It*	Numerous/debatable
Ligeti, György	"Kyrie" from *Mass*	Polyphonic
Messiaen, Olivier	*Quartet for the End of Time*	Homorhythmic/Heterophonic
Rzewski, Frederic	*Les Moutons de Panurge*	Homorhythmic/Homophonic
Saariaho, Kaija	*Sept Papillons*	Monophonic
Scaletti, Carla	*SunSurge Automata*	Monophonic/debatable
Temple, Alex	*The Man Who Hated Everything*	Many; excellent for extended analysis
TV, Jacob	*The Garden of Love*	Debatable
Washington, Shelley	*Big Talk*	Alternating homophonic/polyphonic
Z, Pamela	*Feral*	Polyphonic/debatable

Example 12.
Representative examples for introducing textural categories.
Examples of fixed media and examples featuring electronic voices have been categorized as "debatable" as per the parenthetical in the previous paragraph.

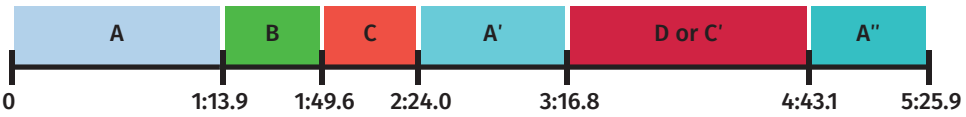
In addition to incorporating contemporary examples into the usual rapid-fire "what's the texture?" exercises (suitable examples for which are listed in Example 12) more extended exercises in which texture plays a major role in dictating form can be used. Pieces that have formal markers dictated by clearly demarcated textural shifts are ideal, and once again allow students to formulate an understanding (or at least a partial understanding) of a piece using basic theoretical concepts. Examples by Ligeti, Penderecki, Takemitsu, Saariaho, Adams, and Ustvolskaya could all make suitable lessons but I will be illustrating a texture-driven form lesson using "Turangalîla 1" from Messiaen's *Turangalîla Symphony*. This lesson is actually an ideal introduction to texture as a general principle: even without knowing the term or any of the types thereof (monophonic, homophonic, polyphonic, etc.) students will grasp that it is—or can be seen as—a driving force behind the piece's structure.

Objective 1: Students will aurally identify formal sections of Messiaen's "Turangalîla 1" based on textural/timbral shifts.

Objective 2: Students will qualify the textural/timbral areas in "Turangalîla 1"

This lesson is an excellent opportunity to involve various classroom technologies. There is no need to reference the score at all in teaching this lesson, so students will identify formal markers by timestamp. Various free technologies enable students to share their ideas in real time without needing to shout out their answers. Padlet,[29] Poll Everywhere,[30] or Google Forms[31] all offer a free interface where students can share thoughts in an anonymous manner. Poll Everywhere and Google Forms offer more control than Padlet, which offers a real time unmoderated chat format. A poll/form that allows for short written response answers can quickly gather responses to questions along the lines of "where do you hear the first major section change: [Student Answer]," "Where do you hear the next major section change: [Student Answer]," etc.

After listening, the instructor can display the results and use this to guide the construction of a form diagram. This can be done by hand, or, better yet, using a program such as Variations Audio Timeliner. There are a number of advantages to using the program. First, and foremost, it allows for effective and proportional visualization of the piece's form. It also introduces students to an exceptionally useful tool that they are likely to encounter in later semesters in their study of tonal forms. A form diagram of "Turangalîla 1" constructed in Variations Audio Timeliner is shown in Example 13. Students should discuss how they distinguish between sections, with conclusions that will inevitably point to texture and instrumental timbre.



Example 13.
Variations Audio Timeliner diagram showing a possible formal analysis of "Turangalîla 1" from a textural perspective.

29 www.padlet.com

30 www.pollev.com

31 docs.google.com/forms

Once a diagram is constructed, students will listen to the piece again, this time section-by-section, and once again use a poll/survey/chat feature to share their thoughts on adjectives that can describe each section. These terms will be used later on to define our standard types of musical texture. The first section, might be described as "sparse," "ethereal," "thin," or "eerie," or might be described in terms of its instrumentation (solo clarinet with sparse accompaniment). Once students have come to an agreement about the general nature of the section, we can give it the label "monophonic." The same process can be used on the remaining sections of the piece, which can varyingly be described as homophonic and polyphonic.

6. Melody.

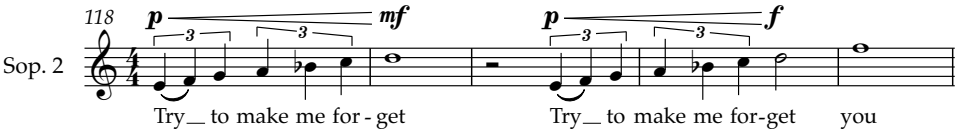
6.1. Melodic Design.

Like the subtopics pertaining to rhythm, any number of the subtopics associated with melody can be effectively illustrated using art music[32] from the 20th and 21st centuries. In illustrating melodic design (i.e. stepwise melodic construction), art song is an especially useful genre on which to draw. As in almost every instance there are far too many pieces that could effectively illustrate the topic to list here. I will illustrate a portion of a lesson on melodic design using Missy Mazzoli's *Vespers for a New Dark Age*.

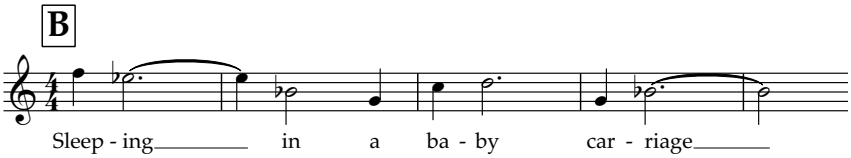
Our lesson here is extremely straightforward, and similar to the rapid-fire exercises used for topics like meter and texture. Once students are familiar with general principles of stepwise melodic design, be it through inquiry-based learning or a lecture, the instructor will present scores and audio and ask students to critique the melodic construction. *Vespers* offers instances that strictly adhere to these concepts (see Example 14a) and many that do not, or do so to a lesser extent (see Example 14b). Students can, as in the case of Wolfe's "Flowers," or Ives's "The Cage," discuss the emotional/affectual implications of these different melodic shapes and hypothesize as to why Mazzoli might have made the choices that she did given the text.

32 Once again, this is an excellent opportunity for the incorporation of vernacular forms into the classroom as well.

(a) mm. 118–122, demonstrating precise melodic design.



(b) mm. 18–22, demonstrating non-stepwise stepwise melodic design.



Example 14.
Missy Mazzoli, "Wayward Free Radical Dreams," from *Vespers for a New Dark Age*."

6.2. Compound Melody.

All of the topics illustrated thus far in this paper have been ones that fall into the category of music theory fundamentals. While it is of great benefit to front load the curriculum with contemporary music to help dispel student misconceptions, it is also necessary to continue to include more modern music wherever possible in later semesters. One occasion for this is the topic of compound melody. Though the topic is often illustrated via the Bach Cello Suites (and other pieces of that era), there is a rich tradition of compound melody in more contemporary music as well. Numerous excellent examples of this can be found in the flute and saxophone music of Sigfrid Karg-Elert. Many of Karg-Elert's *Thirty Caprices for Solo Flute* demonstrate often deliberate similarities to Bach's compound melodic writing, and while the caprices are not all entirely atonal, they exhibit substantial progression in that direction. *Caprice No. 13* is an especially nice example which allows students not only to create a reduction of the acting compound melody, but also to observe important patterns governing how the piece functions.

Like the Bach Cello Suites, *Caprice No. 13* includes aurally identifiable multiple voices with the added challenge of being written "quasi two flutes," each of which has two voices. Our objectives in utilizing this piece are:

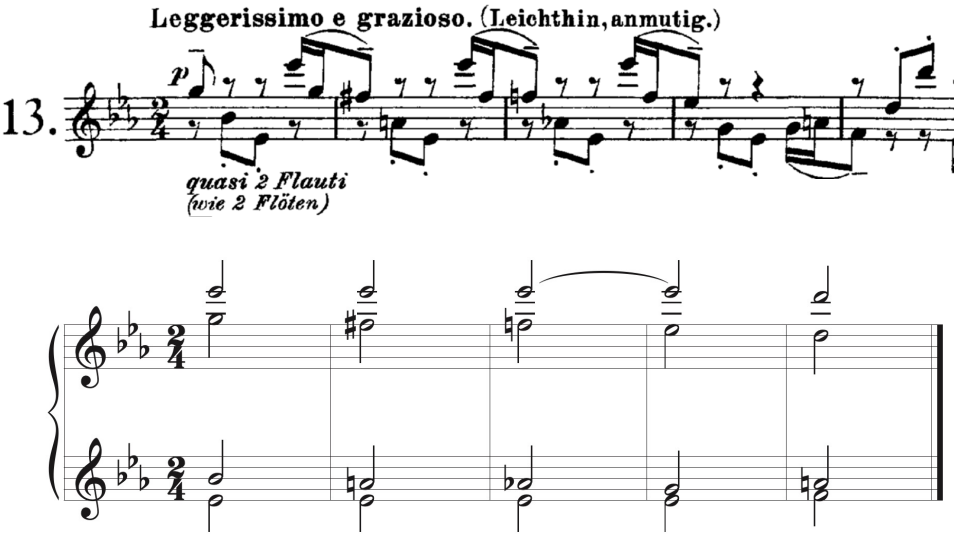
Objective 1: Students will identify the multiple voices present in a recording of Karg-Elert's *Caprice No. 13* (mm. 1-5)

Objective 2: Students will create a two-staff reduction of the first 5 measures of the caprice showing the discrete paths taken by each voice.

Objective 3: Students will discuss any patterns they see in their reductions and theorize as to any performance implications thereof.

The piece can be experienced aurally first, or with the score alongside immediately, and, after listening to the opening at least once, students will discuss in small groups how many voices are present, which in this case is an interesting discussion for them to have, as Karg-Elert includes the performance instruction "quasi two flutes," and splits beams to separate the two *parts*, but students need to identify that there are two voices per part (four overall voices).

Once they have identified the number of voices, they can construct a reduction of the opening five measures. A score excerpt and sample reduction are shown in Example 15. With their reductions complete students will be able to discuss the construction of the piece's opening, with both of the descending chromatic lines and pedals readily apparent. The final step is to discuss performance implications of their discoveries. The instructor can guide them to the conclusion that the chromatic line should be emphasized, despite not being the highest voice, which is where younger or less experienced students will often tend to look for the primary melodic line.



Example 15.
Sigfried Karg-Elert, "Leggerissimo e Grazioso," from *Thirty Caprices for Solo Flute*, mm. 1–5, with accompanying four-voice reduction.

7. Counterpoint.

If we teach music analysis as a linear or horizontal endeavor—and we should, since music is an art form that unfolds *linearly* in time—we need to spend considerable class time on the topic of counterpoint, that is: how do two or more voices relate to each other over time. This is, once again, a topic that is very often approached exclusively through the art music of the common practice era, despite a tradition of contrapuntal writing both pre- and postdating this era (not to mention the counterpoint present in vernacular forms). With this in mind, bringing the art music of the 20th and 21st centuries (as well as other genres of music) into the discussion of various contrapuntal topics is a relatively straightforward task. Many topics under the umbrella of counterpoint—identification of contrapuntal interval, imitation, canon, etc.—occur relatively early in the theory sequence. One topic that traditionally falls somewhere between these early topics and study of atonal counterpoint, and one that is often rather light on substance, is that of invertible counterpoint.

After some exercises in writing counterpoint against a *cantus firmus* and experimenting with flipping the voices and seeing how it affects the quality of the counterpoint, lessons in invertible counterpoint often become "word search"[33]

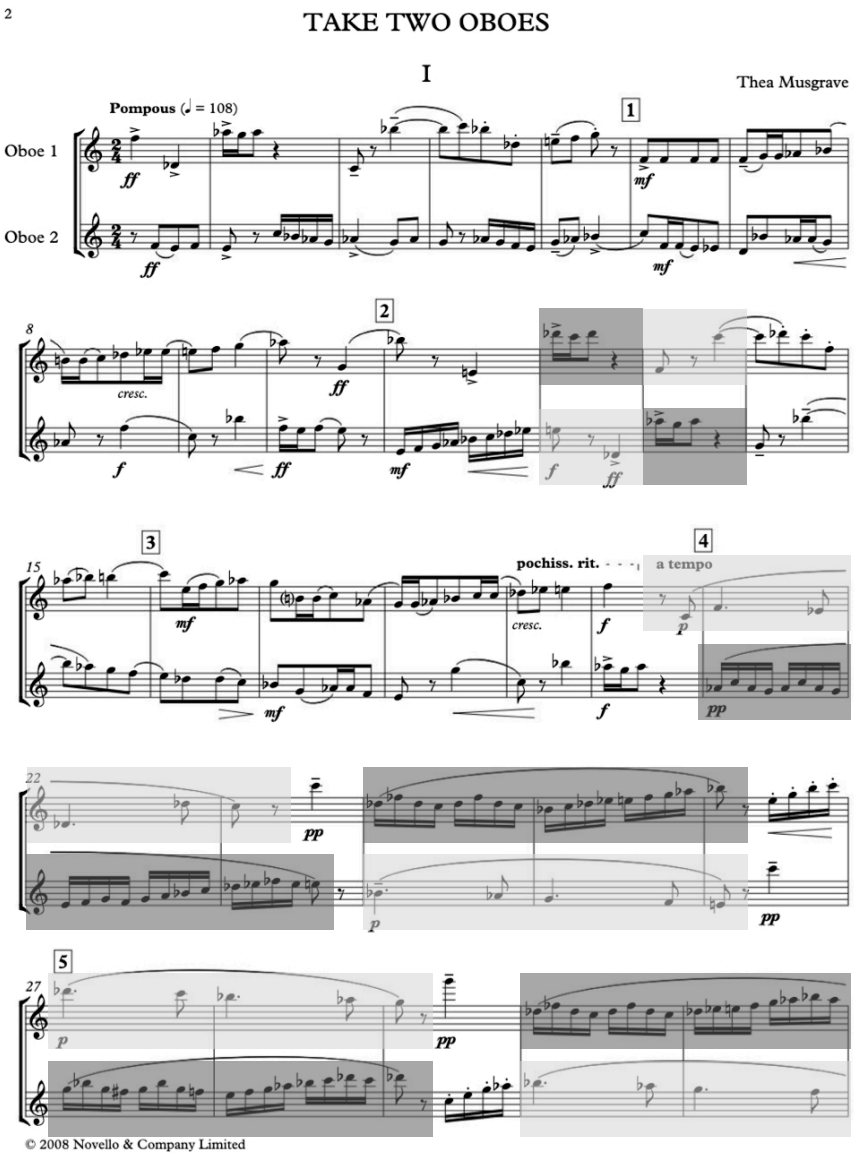
33 Credit to Dr. Bruce Taggart of Michigan State University for this analogy.

activities. Rather than re-designing the wheel at this point, I would advocate simply varying the type/variety of repertoire used in this activity. A good piece to end this activity on is Thea Musgrave's *Take Two Oboes* (annotated score shown in Example 16). Not only is it a 21st-Century piece by a living female composer, but also a piece that may resemble the type of repertoire first- or second-year theory students might encounter in their applied lessons. This opens up opportunity to discuss how an observation of invertible counterpoint could impact performance. Our objectives are:

> **Objective 1:** Students will identify instances of invertible counterpoint in Thea Musgrave's *Take Two Oboes* (mm.1-31)
>
> **Objective 2:** Students will discuss performance implications of the invertible counterpoint they identified as part of objective 1.

The activity should begin with the score alone, with students instructed to identify instances of invertible counterpoint by circling/highlighting them on the score (this annotation is shown in Example 16 on the following page). The instances of invertible counterpoint beginning in m. 21 are the most obvious (and best)examples of the technique, but students will likely also identify the inexact use of the technique earlier in the piece, which can prompt a discussion of ways in which specific concepts (particularly tonal concepts) can be used in a more metaphorical sense to guide analysis of post-common-practice compositions.

Next, students will be placed in the hypothetical position of needing to perform the piece. How might the observation of invertible counterpoint influence that performance? Students will likely realize that the inversion of the line indicates that the relative roles of the voices are being reversed, reducing (in the latter examples) the importance of the sixteenth note line in favor of the melodic line. Our final step will be to listen to a recording of the piece and discuss whether or not the performers made the same decisions that we predicted they would make.



Example 16.
Thea Musgrave, *Take Two Oboes*, mm. 1-31, with annotations showing instances of invertible counterpoint.

IV. Future Research

As stated previously, this paper is only the first phase of my research. My intent is to continue making my way through the topics common to many music theory sequences. In particular, I will be giving attention to elements of harmony, voice leading, form (sentences, periods, basic formal structures, etc.), further exploration of counterpoint, and other topics such as text-music relationships, symmetry, quotation, and advanced metric topics. In doing so, I will draw on examples that deliberately represent a more diverse body of composers, styles, and instrumentations than would likely be seen otherwise, and continue to show how topics can be applied to music beyond that of the Common Practice Era.

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